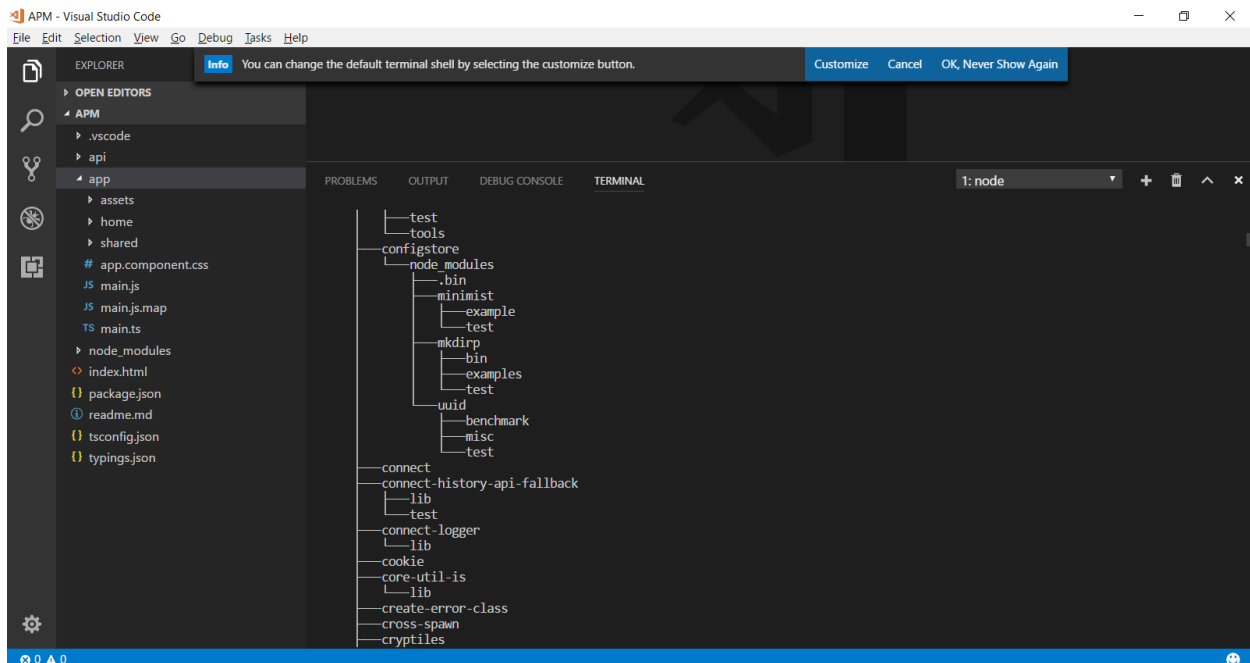


1. [git link](https://github.com/Training2017/ANG2_OCT)  
[https://github.com/Training2017/ANG2\\_OCT](https://github.com/Training2017/ANG2_OCT)
2. Install visual studio code  
<https://code.visualstudio.com/download>
3. Install npm with nodejs. You can install node using below url:
4. Download angular project setup from below link  
[www.angular.io](http://www.angular.io) quick start
5. Angular CLI  
<https://github.com/angular/angular-cli>

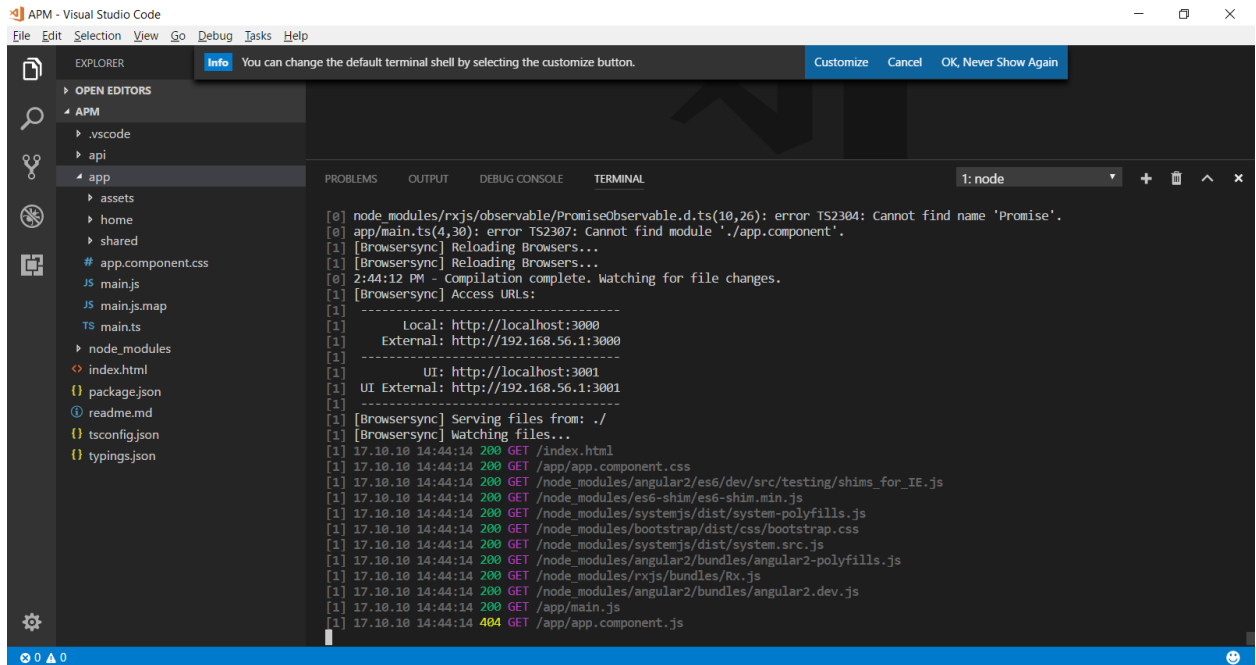
### **First Angular Application**

1. Download all files from the below forked URL  
[https://github.com/Training2017/ANG2\\_OCT](https://github.com/Training2017/ANG2_OCT)
2. Copy folder called APM-start into your working directory and rename the folder as APM
3. Now open visual studio code editor
4. Open APM folder within it
5. Open terminal window in the Editor by right click any file and open terminal
6. Locate folder called APM in your terminal and enter below command  
npm install
7. This will install all dependencies into your project



8. After npm install command you can see node\_module folder in your project which has all dependencies

9. Enter **npm start** command in the terminal, you can see below in your terminal



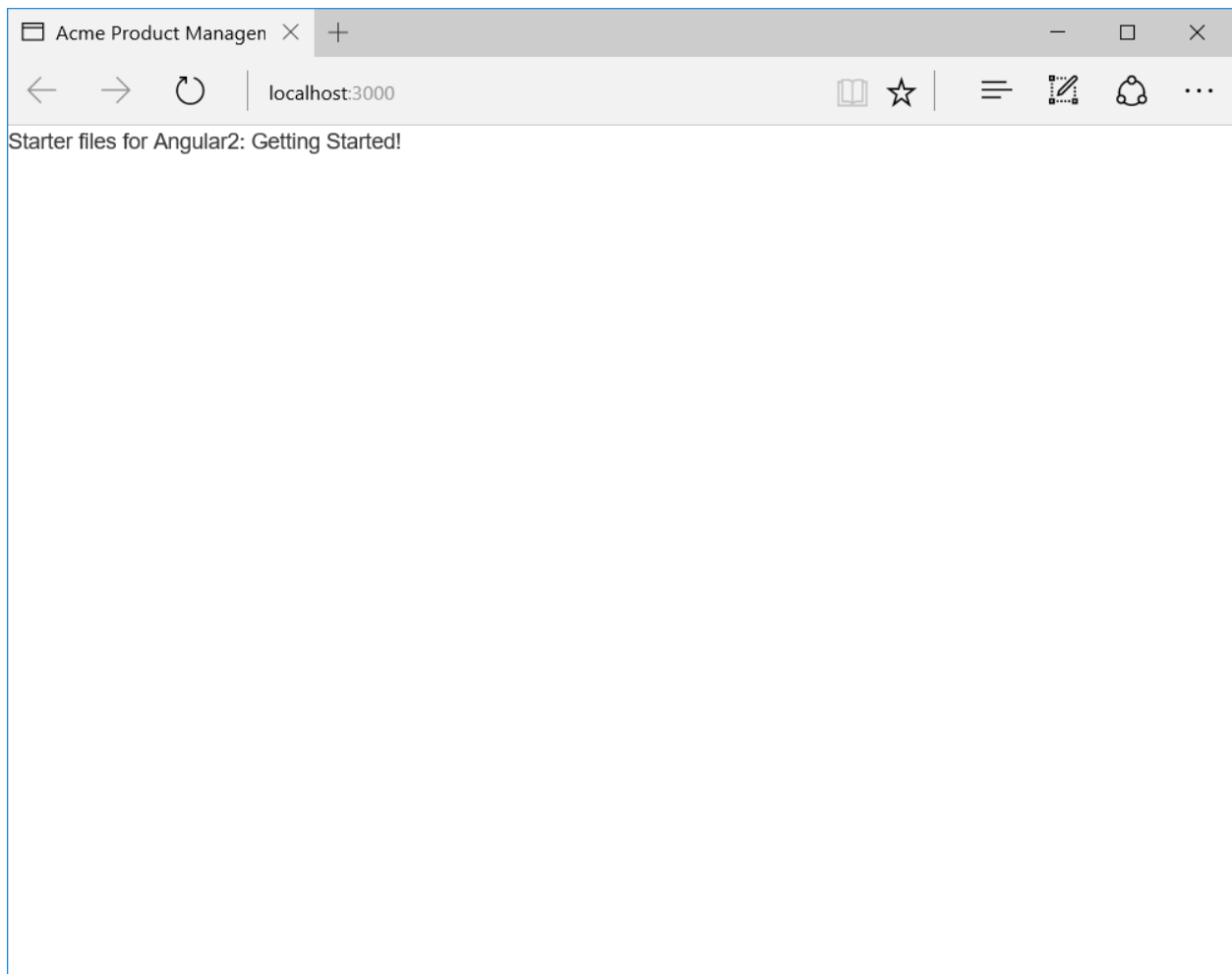
The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying a project structure. The main area is the Terminal, which shows the output of the `npm start` command. The output includes error messages about missing modules, a successful compilation, and the Browsersync server starting on localhost:3000 and 3001. The terminal also shows several HTTP requests from 17.10.10 to the server, including a 404 error for `/app/app.component.js`.

```
APM - Visual Studio Code
File Edit Selection View Go Debug Tasks Help

EXPLORER
  OPEN EDITORS
  APM
    .vscode
    api
    app
      assets
      home
      shared
      # app.component.css
      JS main.js
      JS mainjs.map
      TS main.ts
      node_modules
      index.html
      package.json
      readme.md
      tsconfig.json
      typings.json

TERMINAL
  1: node
  [0] node_modules/rxjs/observable/PromiseObservable.d.ts(10,26): error TS2304: Cannot find name 'Promise'.
  [0] app/main.ts(4,30): error TS2307: Cannot find module './app.component'.
  [1] [Browsersync] Reloading Browsers...
  [1] [Browsersync] Reloading Browsers...
  [0] 2:44:12 PM - Compilation complete. Watching for file changes.
  [1] [Browsersync] Access URLs:
  [1] -----
  [1] Local: http://localhost:3000
  [1] External: http://192.168.56.1:3000
  [1] -----
  [1] UI: http://localhost:3001
  [1] UI External: http://192.168.56.1:3001
  [1] -----
  [1] [Browsersync] Serving files from: ./
  [1] [Browsersync] Watching files...
  [1] 17.10.10 14:44:14 200 GET /index.html
  [1] 17.10.10 14:44:14 200 GET /app/app.component.css
  [1] 17.10.10 14:44:14 200 GET /node_modules/angular2/es6/dev/src/testing/shims_for_IE.js
  [1] 17.10.10 14:44:14 200 GET /node_modules/es6-shim/es6-shim.min.js
  [1] 17.10.10 14:44:14 200 GET /node_modules/systemjs/dist/system-polyfills.js
  [1] 17.10.10 14:44:14 200 GET /node_modules/bootstrap/dist/css/bootstrap.css
  [1] 17.10.10 14:44:14 200 GET /node_modules/systemjs/dist/system.src.js
  [1] 17.10.10 14:44:14 200 GET /node_modules/angular2/bundles/angular2-polyfills.js
  [1] 17.10.10 14:44:14 200 GET /node_modules/rxjs/bundles/Rx.js
  [1] 17.10.10 14:44:14 200 GET /node_modules/angular2/bundles/angular2.dev.js
  [1] 17.10.10 14:44:14 200 GET /app/main.js
  [1] 17.10.10 14:44:14 404 GET /app/app.component.js
```

10. The `npm start` command parallelly opens the browser with url “localhost:4200” with welcome message.



## App Component

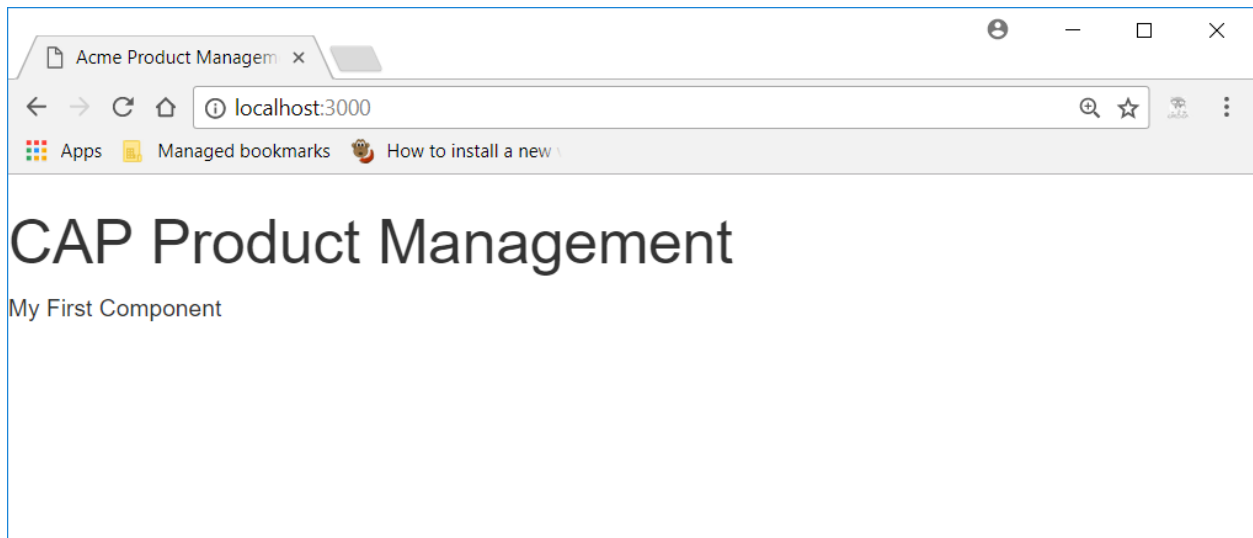
1. Create app.component.ts file with the following content:

```
import { Component } from 'angular2/core';

@Component({
  selector: 'pm-app',
  template: `
    <div>
      <h1>{{pageTitle}}</h1>
      <div>My First Component</div>
    </div>
  `
})
```

```
export class AppComponent{
  pageTitle: string= 'CAP Product Management';
}
```

2. Now start your application with **npm start** command. You can see your application in the browser:



### Product Component:

3. Add new folder called **products** under **app** directory.
4. Add file called **product-list.component.html** under products folder
5. Include below content into **product-list.component.html**

```
<div class='panel panel-primary'>
  <div class='panel-heading'>
    Product List
  </div>
  <div class='panel-body'>
    <div class='row'>
      <div class='col-md-2'>Filter by:</div>
      <div class='col-md-4'>
        <input type='text' />
      </div>
    </div>
    <div class='row'>
      <div class='col-md-6'>
        <h3>Filtered by: </h3>
      </div>
    </div>
  </div>
</div>
```

```

        </div>
    </div>
    <div class='table-responsive'>
        <table class='table'>
            <thead>
                <tr>
                    <th>
                        <button class='btn btn-primary'>
                            Image
                        </button>
                    </th>
                    <th>Product</th>
                    <th>Code</th>
                    <th>Available</th>
                    <th>Price</th>
                    <th>5 Star Rating</th>
                </tr>
            </thead>
            <tbody>

            </tbody>
        </table>
    </div>
</div>
</div>

```

6. Modify the **app.component.ts** file as mentioned below:

```

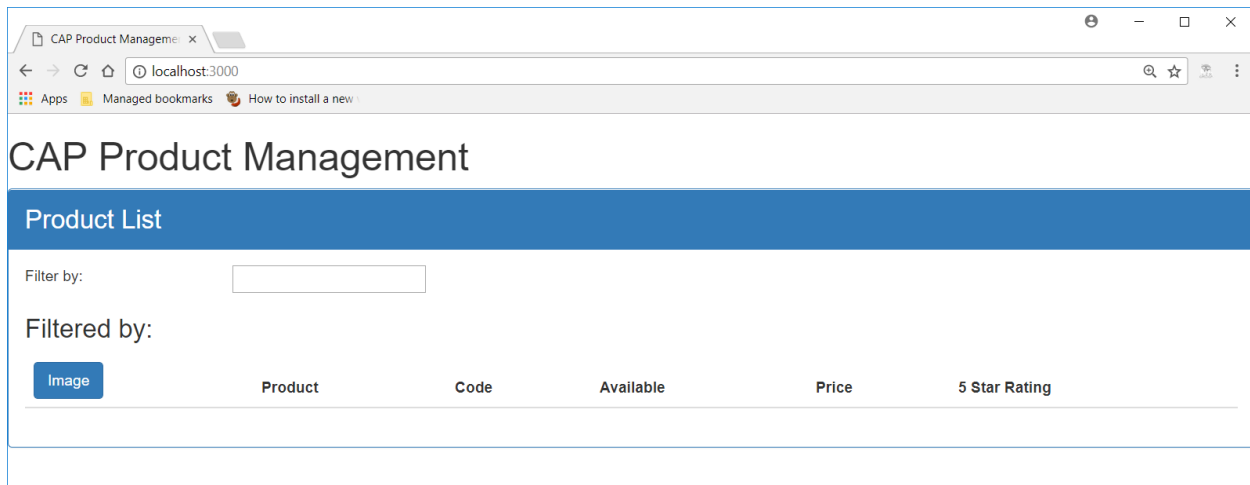
import { Component } from 'angular2/core';
import { ProductListComponent } from './products/product-
list.component';

@Component({
  selector: 'pm-app',
  template: `
    <div>
      <h1>{{pageTitle}}</h1>
      <pm-products></pm-products>
    </div>
  `,
  directives: [ProductListComponent]
})

export class AppComponent{
  pageTitle: string= 'CAP Product Management';
}

```

7. Now if you check your browser you can see the below content:



### **Binding with interpolation:**

8. Add pageTitle in your product-list.component.ts file as mentioned below:

```
import { Component } from 'angular2/core';

@Component({
  selector: 'pm-products',
  templateUrl: 'app/products/product-list.component.html'
})
export class ProductListComponent {
  pageTitle: string = 'Product List';
}
```

9. Add the pageTitle in your product-list.component.html file as mentioned below:

```
<div class='panel panel-primary'>
  <div class='panel-heading'>
    {{pageTitle}}
  </div>
  <div class='panel-body'>
    <div class='row'>
      <div class='col-md-2'>Filter by:</div>
      <div class='col-md-4'>
        <input type='text' />
      </div>
    </div>
  </div>
</div>
```

```
        </div>
    </div>
    ...
    ...
```

10. Data which is represented `{{ data }}` in this format known as interpolation.

### Adding Logic with Directives:

11. Add product details in product-list.components.ts file

```
product-list.components.ts
import { Component } from 'angular2/core';
import { ProductListComponent } from './products/product-list.component';

@Component({
  selector: 'pm-app',
  template: `
    <div>
      <h1>{{pageTitle}}</h1>
      <pm-products></pm-products>
    </div>
  `,
  directives: [ProductListComponent]
})

export class AppComponent{
  pageTitle: string= 'CAP Product Management';
  products: any[] = [
    {
      "productId": 2,
      "productName": "Garden Cart",
      "productCode": "GDN-0023",
      "releaseDate": "March 18, 2016",
      "description": "15 gallon capacity rolling garden cart",
      "price": 32.99,
      "starRating": 4.2,
      "imageUrl": "http://openclipart.org/image/300px/svg_to_png/58471/garden_cart.png"
    },
    {
      "productId": 5,
      "productName": "Hammer",
      "productCode": "TBX-0048",
      "releaseDate": "May 21, 2016",
      "description": "Curved claw steel hammer",

```

```

        "price": 8.9,
        "starRating": 4.8,
        "imageUrl": "http://openclipart.org/image/300px/svg_to_png/73/rejon_Hammer.png"
    }
];
}

```

12. Add \*ngIf one of the built in directives in your product-list.component.html file.

#### product-list.component.html

```

<div class='panel panel-primary'>
  <div class='panel-heading'>
    {{pageTitle}}
  </div>
  <div class='panel-body'>
    <div class='row'>
      <div class='col-md-2'>Filter by:</div>
      <div class='col-md-4'>
        <input type='text' />
      </div>
    </div>
    <div class='row'>
      <div class='col-md-6'>
        <h3>Filtered by: </h3>
      </div>
    </div>
    <div class='table-responsive'>
      <table class='table' *ngIf='products && products.length'>
        <thead>
          <tr>
            <th>
              <button class='btn btn-primary'>
                Image
              </button>
            </th>
            <th>Product</th>
            <th>Code</th>
            <th>Available</th>
            <th>Price</th>
            <th>5 Star Rating</th>
          </tr>
        </thead>
        <tbody>

        </tbody>
      </table>
    </div>
  </div>
</div>

```

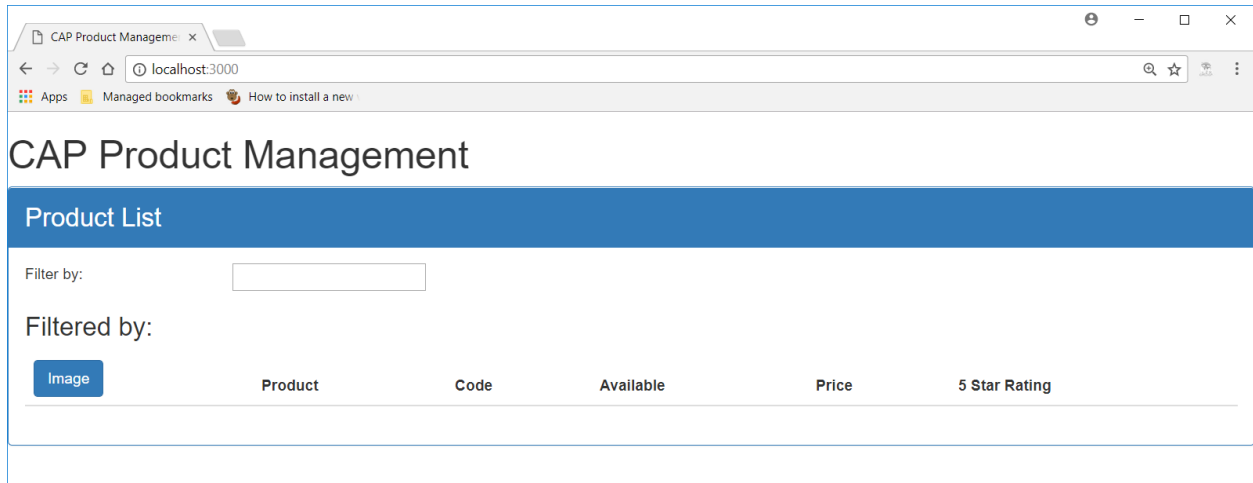


```

        </table>
      </div>
    </div>
  </div>

```

13. Now you can see the below screen in your browser:



If you remove any[] array with product details it will not show title in the above table.

### \*ngFor directives

14. Modify your <tbody> tag as mentioned below in your product-list.component.html file

#### product-list.component.html

```

<div class='panel panel-primary'>
  <div class='panel-heading'>
    {{pageTitle}}
  </div>
  <div class='panel-body'>
    <div class='row'>
      <div class='col-md-2'>Filter by:</div>
      <div class='col-md-4'>
        <input type='text' />
      </div>
    </div>
    <div class='row'>
      <div class='col-md-6'>
        <h3>Filtered by: </h3>
      </div>
    </div>
  </div>

```

```

<div class='table-responsive'>
  <table class='table' *ngIf='products && products.length'>
    <thead>
      <tr>
        <th>
          <button class='btn btn-primary'>
            Image
          </button>
        </th>
        <th>Product</th>
        <th>Code</th>
        <th>Available</th>
        <th>Price</th>
        <th>5 Star Rating</th>
      </tr>
    </thead>
    <tbody>
      <tr *ngFor='#product of products'>
        <td></td>
        <td>{{product.productName}}</td>
        <td>{{product.productCode}}</td>
        <td>{{product.releaseDate}}</td>
        <td>{{product.price}}</td>
        <td>{{product.starRating}}</td>
      </tr>
    </tbody>
  </table>
</div>
</div>
</div>

```

15. Now check your browser you can see the product details as below: